From: tony clapes
To: Microsoft ATR
Date: 12/11/01 11:52pm
Subject: Microsoft Settlement

I have taken the liberty of marking up and annotating the Proposed Final Judgment to effectuate its stated purposes. On the basis of extensive experience with administered antitrust and intellectual property regimes such as is proposed in the PFJ, I can see a number of places in which the language will have proved ill-advised in the implementation. The most closely analogous regimes with which I have had in-depth experience are: the 1956 IBM Consent Decree; the IBM Undertaking in the EU; the IBM-Fujitsu arbitration; and a confidential settlement regime in a major software copyright case involving IBM and another major supplier of computer hardware and software.

As co-counsel for Bristol Technology Inc., I had access to much of the evidence in the Microsoft case, as well as independent access to some of the major interested third parties and amici, and independent access to Microsoft documents, executives and employees. While much of the foregoing access was under protective order or other confidentiality restriction, and I have therefore not relied on it in formulating my attached comments, you may rest assured that I do not speak in ignorance of the evidence in US v. Microsoft, of the dynamics of the PC operating systems business or of the views of the more active third parties and amici.

The views expressed in the markup are my own, at the moment. I am not acting on behalf of anyone in this matter. Since it is an open-source draft, however, other persons may make use of it in framing their own comments, or may suggest to me revisions that I decide to post in subsequent drafts.

If you have any questions about the attached markup, please don't hesitate to contact me.

For more information on my background, see: www.dmpress.com/cv.htm

Quotable, Dynamic Open Source (QDOS) Draft Final Judgment in US v. Microsoft (Rev. 0.5)*



Below is an open source draft based as much as possible on the settlement reached by the Justice Department and Microsoft, but with changes necessary to make the remedies effective, as compared to the language that was changed, which will not produce effective remedies. This draft, being "open source", may be freely copied and distributed, and may be used to create derivative works that can be freely copied or distributed. No attribution is necessary. If you find it helpful, take and do with it what you will.

The stated aim of the MS/DoJ Proposed Final Judgment is to "provide a prompt, certain and effective remedy for consumers by imposing injunctive relief to halt continuance and prevent recurrence of the violations of the Sherman Act by Microsoft that were upheld by the Court of Appeals and restore competitive conditions to the market." USDOJ Competitive Impact Statement, 11/15/01. However, like all settlements, this one is a compromise, and it is one in which the parties have addressed most of the problems, but not solved them. Basically, the structure of the deal is sound, but the content will not, without changes in the areas indicated below, provide a remedy that is either prompt, certain or effective.

Most if not all of the alterations below are self-explanatory and obvious to anyone in the software industry. They are based on the author's experience with supervised antitrust and intellectual property settlements. For the markup-challenged, strikethroughs mean delete, boldface means add. Annotations are also in boldface. Send comments, questions or report bugs to webmaster@dmpress.com. Also, as with open source code generally, the author will accept improvements and post them in subsequent beta or release updates. The webmaster will collect such submissions as well. Note: the author may or may not find your submission to be an improvement.

Despite the fact that the Justice Department's abandonment of the remedy of splitting Microsoft into separate companies, one for systems software and one for applications software, the fact that the trial judge felt it necessary to impose such a drastic remedy strongly suggests that an effective remedy, one that restores competition, probably lies at the interface between the OS and the apps. The DoJ seems to think that middleware is the key to solving the problems at that interface. It is not. The key is to open up the interface and close down the money the money that flows from Microsoft to third party developers at that interface. That reality is what drives the following redraft.

Of course, the remedy is constrained by the scope of acts found unlawful; at the same time, it may go beyond simply enjoining past behavior in order to restore competitive conditions. That is why the open-source redraft is based so heavily on the Proposed Final Judgment.

ALC, 12/02/01

I.Jurisdiction

This Court has jurisdiction of the subject matter of this action and of the person of Microsoft.

II. Applicability

This Final Judgment applies to Microsoft and to each of its officers, directors, agents, employees, subsidiaries, successors and assigns; and to all other persons in active concert or participation with any of them who shall

have received actual notice of this Final Judgment by personal service or otherwise.

III.Prohibited Conduct

A. Microsoft shall not retaliate against an OEM by altering alter Microsoft's commercial relations with that an OEM, or by withholding withhold newly introduced forms of non-monetary Consideration (including but not limited to new versions of existing forms of non-monetary Consideration) from that an OEM, because it is known to Microsoft that the OEM is or is contemplating:

1.developing, distributing, promoting, using, selling, or licensing any software that competes with Microsoft Platform Software or any product or service that distributes or promotes any Non-Microsoft Middleware;

2.shipping a Personal Computer that (a) includes both a Windows Operating System Product and a non-Microsoft Operating System, or (b) will boot with more than one Operating System or (c) includes only a non-Microsoft Operating System; or

3.exercising any of the options or alternatives provided for under this Final Judgment.

[If Microsoft alters its relations with an OEM for any of the 3 reasons, the government have to prove not only that it happened but that the purpose was "retaliation". It makes no difference to the OEM what Microsoft's actual intent was; the OEM "gets the message". Also proving subjective intent is so difficult that the antitrust laws at one time jettisoned the requirement in pricing cases.]

Nothing in this provision shall prohibit Microsoft from enforcing any provision of any license with any OEM or any intellectual property right that is not inconsistent with this Final Judgment. Microsoft shall not terminate a Covered OEM's license for a Windows Operating System Product without having first given the Covered OEM written notice of the reasons for the proposed termination and not less than thirty days' opportunity to cure. Notwithstanding the foregoing, Microsoft shall have no obligation to provide such a termination notice and opportunity to cure to any Covered OEM that has received two or more such notices during the term of its Windows Operating System Product license.

Nothing in this provision shall prohibit from providing Consideration to any OEM with respect to any Microsoft product or service where that Consideration is commensurate with the absolute level or amount of that OEM's development, distribution, promotion, or licensing of that Microsoft product or service , except that Microsoft is prohibited from providing Consideration to any OEM with respect to any Microsoft Platform Software product.

[The OEM's already procure vast quantities of platform software from Microsoft. There's no commercial justification for Microsoft paying any consideration to an OEM for acquiring its platform software. MS Consideration comes in the form not only of money but also of technical support, access to MS "secrets", marketing support and certification. Allowing MS to favor large OEMs in these respects weakens smaller OEMs who may be more willing to venture into Linux and other non-MS platform software.]

B. Microsoft's provision of Windows Operating System Products to Covered OEMs shall be pursuant to uniform license agreements with uniform terms and conditions. Without limiting the foregoing, Microsoft shall charge each Covered OEM the applicable royalty for Windows Operating System Products as set forth on a schedule, to be established by Microsoft and published on a web site accessible to the Plaintiffs and all Covered OEMs, that provides for uniform royalties for Windows Operating System Products, except that:

1.the schedule may specify different royalties for different language versions;

2.the schedule may specify reasonable volume discounts based upon the actual volume of licenses of any Windows Operating System Product-or any group of such products; and

[Allowing Microsoft to group products for purposes of determining quantity discounts provides a benefit not consonant with the antitrust justifications for quantity discounts: lower product costs or meeting competition. It facilitates a kind of "bundling" of separate products that is more a reward to Microsoft than a remedy.]

3. the schedule may not include market development allowances, programs, or other discounts in

[The original 3B fails to recognize the commercial realities. Under this provision, Microsoft may offer "uniformly" various allowances programs or discounts that are in practical terms only applicable, useful or attractive to targeted OEMs. In other words, what is in form nondiscriminatory can in fact be discriminatory. There's no reason to allow these amorphous forms of largess to be used to sweeten quantity discounts.]

C. Microsoft shall not restrict by agreement any OEM licensee from exercising any of the following options or alternatives:

1.Installing, and displaying icons, shortcuts, or menu entries for, any Non-Microsoft Middleware or any product or service (including but not limited to IAP products or services) that distributes, uses, promotes, or supports any Non-Microsoft Middleware, on the desktop or Start menu, or anywhere else in a Windows Operating System Product where a list of icons, shortcuts, or menu entries for applications are generally displayed, except that Microsoft may restrict an OEM from displaying icons, shortcuts and menu entries for any product in any list of such icons, shortcuts, or menu entries specified in the Windows documentation as being limited to products that provide particular types of functionality, provided that the restrictions are non-discriminatory with respect to non-Microsoft and Microsoft products.

[The exception clause deleted above is vague, ambiguous and incomprehensible. What is a "list" in Windows terms except a program name and an icon? The deleted language allows Microsoft documentation to define where an OEM may place its icons, shortcuts and menu entries. It allows Microsoft to define where non-MS products will be accessible in what is now a modest part of the Windows desktop, but could at any time be a larger part.

2.Distributing or promoting Non-Microsoft Middleware by installing and displaying on the desktop shortcuts of any size or shape so long as such shortcuts do not impair the functionality processing of the user interface components of Windows Operating System Products.

["Functionality" is vague and ambiguous. As long as the shortcuts don't impair the processing of the Windows GUI, MS should not be able to restrict their installation or display.]

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- 3.Launching automatically, at the conclusion of the initial boot sequence or subsequent boot sequences, or upon connections to or disconnections from the Internet, any Non-Microsoft Middleware if a Microsoft Middleware Product that provides similar functionality would otherwise be launched automatically at that time, provided that any such Non-Microsoft Middleware displays on the desktop no user interface or a user interface of similar size and shape to the user interface displayed by the corresponding Microsoft Middleware Product.
- 4.Offering users the option of launching other Operating Systems from the Basic Input/Output System or a non-Microsoft boot-loader or similar program that launches prior to the start of the Windows Operating System Product.
- 5.. Presenting in the initial boot sequence its own IAP offer provided that the OEM complies with reasonable technical specifications established by Microsoft, including a requirement that the end user be returned to the initial boot sequence upon the conclusion of any such offer.
 - 6. Exercising any of the options provided in Section III. H of this Final Judgment.
- D. Starting at the earlier of the release of Service Pack 1 for Windows XP or 12 monthsone month after the submission of this Final Judgment to the Court, Microsoft shall disclose to ISVs, IHVs, IAPs, ICPs, and OEMs, for the sole purpose of interoperating with a Windows Operating System Product—via the Microsoft Developer Network ("MSDN") or similar mechanisms, the APIs and related Documentation that are used by Microsoft Middleware to interoperate with a Windows Operating System Product. In the case of a new major version of Microsoft Middleware, the disclosures required by this Section III.D shall occur no later than the last first major beta test release of that Microsoft Middleware. In the case of a new version of a Windows Operating System Product, the obligations imposed by this Section III.D shall occur in a Timely Manner. All disclosures under this paragraph shall be updated to inform recipients of such disclosures of any changes in the APIs and related Documentation disclosed.
- [a. Why should the intial disclosures be delayed by year? The calls to an OS function should be readily identifiable in the middleware code.
- b. Disclosure via MSDN requires people who wants this info to join MSDN and thereby identify themselves to MS and subject themselves to unwanted contacts from MS. There's no need for this. The info can be posted in the clear on MS' web site, with a click-through agreement.
- c. The change from "last" to "first" is to make the disclosure provision commercially effective by getting the disclosures to third parties in time to allow them to have a chance of getting product to market before MS floods the market. Even *first* beta is somewhat late for this purpose. d. Obviously, the disclosures should be updated as MS middleware is upgraded, enhanced or "fixed".]
- E. Starting nine months one month after the submission of this proposed Final Judgment to the Court, Microsoft shall make available for use by third parties, for the sole purpose of interoperating with a Windows Operating System Product, on reasonable and non-discriminatory terms (consistent with Section III.I), any Communications Protocol that as that protocol is, on or after the date this Final Judgment is submitted to the Court, (i) implemented in Windows Platform Software that may be installed on a client computer, and (ii) /or can be used to interoperate natively (i.e., without the addition of software code to the client operating system product) with any Windows Operating System Product Microsoft server operating system product.
- [a. For each protocol implemented there was an MS development requirement and a resulting

- project. MS knows today what communications protocols it has implemented. There's no reason to wait. If practicalities dictate a saving clause requiring MS to submit within a month protocols documented in its code, and submit undocumented protocols within 60 days after, that would be OK. b. what should be disclosed is the protocol as implemented by Microsoft, not the abstract protocol. c. The disclosed protocols should include those implemented before the Judgment too, since those will be the bulk of the protocols in the code for some time to come.
- d. The included products should be those capable of running on a client and those that can be used on a client, not those actually running on a client. Otherwise the parties will constantly be arguing over what a "client" is. (It appears that the parties adopted the undefined term "client" because they meant to include more types of equipment than those included in the defined term "Personal Computer".) e. The disclosed protocols should include those used in peer-to-peer communications, not just those used in communications between client and server. The phrase "products marketed as its successors" is a huge loophole that allows MS to stop providing protocol information simply by changing its advertising or branding. Note here that this draft uses a definition of Windows Operating System Product that includes Windows servers.]
- F. Starting one month after the submission of this Final Judgment to the Court, Microsoft shall disclose to ISVs, IHVs, IAPs, ICPs, and OEMs, for the sole purpose of interoperating with Windows Platform Software, the APIs and related Documentation that are used by Microsoft applications software products to interoperate with Windows Platform Software. In the case of a new major version of Microsoft Middleware, the disclosures required by this Section III.D shall occur no later than the first major beta test release of that Microsoft Middleware. In the case of a new version of a Windows Operating System Product, the obligations imposed by this Section III.F shall occur in a Timely Manner.

[The foregoing addition addresses a key omission from the original draft: the reinforcement of monopoly power through manipulation of APIs at the application software level. "API", after all, stands for "Application Programming Interface", even though its usage in this document doesn't originally address Application Programming Interfaces. The pernicious effect on third parties, particularly ISVs, of leveraging control over application interfaces as between Windows and MS applications can be quite profound.]

GH. 1.Microsoft shall not retaliate against any ISV or IHV because of that ISV's or IHV's:

a.developing, using, distributing, promoting or supporting any software that competes with Microsoft Platform Software or any software that runs on any software that competes with Microsoft Platform Software, or

b.exercising any of the options or alternatives provided for under this Final Judgment.

2.Microsoft shall not enter into any agreement relating to a Windows Operating System Product that conditions the grant of any Consideration on an ISV's refraining from developing, using, distributing, or promoting any software that competes with Microsoft Platform Software or any software that runs on any software that competes with Microsoft Platform Software..., except that Microsoft may enter into agreements that place limitations on an ISV's development, use, distribution or promotion of any such software if those limitations are reasonably necessary to and of reasonable scope and duration in relation to a bona fide contractual obligation of the ISV to use; or distribute or promote any Microsoft software or to develop software for, or in conjunction with, Microsoft, so long as such agreements do not have the effect of conditioning the grant of Consideration on an ISV's refraining from developing, using, distributing, or promoting any software that competes with Microsoft Platform Software or any software that runs on any software that competes with Microsoft Platform Software.

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[Why prohibit these loyalty arrangements and then provide an exception big enough to drive an 18-wheeler through? There should be no exceptions to this prohibition. Microsoft should not have power to condition providing marketing support, technical support, early access to information or any other consideration on loyalty to Windows. Such agreements, disguised as "nondisclosure agreements", can prevent the world's most important ISVs from working in any meaningful way with other OS or middleware suppliers. MS can provide consideration on reasonable terms, including

3. Nothing in this section shall prohibit Microsoft from enforcing any provision of any agreement with any ISV or IHV, or any intellectual property right, that is not inconsistent with this Final Judgment.

confidentiality if reasonable, but only if they don't have the effect of freezing out MS' OS and

H-G. Microsoft shall not enter into any agreement with:

middleware competitors.]

- 1. any IAP, ICP, ISV, IHV or OEM that grants Consideration on the condition that such entity distributes, promotes, uses, or supports, exclusively or in a fixed percentage, any Microsoft Platform Software, except that Microsoft may enter into agreements in which such an entity agrees to distribute, promote, use or support
- Microsoft Platform Software in a fixed percentage whenever Microsoft in good faith obtains a representation
- that it is commercially practicable for the entity to provide equal or greater distribution, promotion, use or
 - support for software that competes with Microsoft Platform Software, or

[MS should not be allowed to bribe people to distribute, promote, use or support its platform software products. Period. The exception in the original language is completely unworkable, because in order to curry MS' favor, third parties will sign anything (and have). What does it mean for MS obtain such abject obeisance in "good faith"?]

2. any IAP or ICP that grants placement on the desktop or elsewhere in any Windows Operating System Product to that IAP or ICP on the condition that the IAP or ICP refrain from distributing, promoting or using any software that competes with Microsoft Middleware.

Nothing in this section shall prohibit Microsoft from entering into (a) any bona fide joint venture or (b) any bona fide joint development or joint services arrangement with any ISV, IHV, IAP, ICP, or OEM for a new product, technology or service, or any material value-add to an existing product, technology or service, in which both Microsoft and the ISV, IHV, IAP, ICP, or OEM contribute significant developer or other resources, that does not expressly or by its operation or effect inhibit prohibits such entity from competing with the object of the joint venture or other arrangement for a reasonable period of time.

- [a. MS can enter into "any bona fide joint venture", but "any joint development or joint services arrangement" (whether bona fide or not, apparently)? This asymmetrical drafting seems to invite trouble.
- b. There are so many vague terms in the above paragraph that it appears either to have been severely under-negotiated or grossly over-negotiated. E.g., "arrangement", "joint services", "material value add", "significant... other resources", "competing with the object". The range of relationships permitted is therefore large and ill-defined, and it is completely unreasonable to permit MS to prohibit competition across that range of activity. Instead, the only such ventures or arrangements permitted should be those that do not inhibit competition. Otherwise, MS could prevent hundreds of third parties from applying their expertise in support of nonMS OS or middleware suppliers for significant

periods. Alternatively, the paragraph can be deleted in its entirety.]

This Section does not apply to any agreements in which Microsoft licenses intellectual property in from a third party.

[The above sentence allows MS to enter into arrangements that preclude competition simply by licensing the other party's trademark.]

- IH. Starting at the earlier of the release of Service Pack 1 for Windows XP or 12 months after the submission of this Final Judgment to the Court, Microsoft shall:
- 1.Allow end users (via a mechanism readily accessible from the desktop or Start menu such as an Add/Remove icon) and OEMs (via standard preinstallation kits) to enable or remove access to each Microsoft Middleware Product or Non-Microsoft Middleware Product by (a) displaying or removing icons, shortcuts, or menu entries

on the desktop or Start menu, or anywhere else in a Windows Operating System Product where a list of icons, shortcuts, or menu entries for applications are generally displayed, except that Microsoft may restrict the display of icons, shortcuts, or menu entries for any product in any list of such icons, shortcuts, or menu entries specified in the Windows documentation as being limited to products that provide particular types of functionality, provided that the restrictions are non-discriminatory with respect to non-Microsoft and Microsoft products; and

[The phrase "limited to products that provide particular types of functionality" is useless as a delimiter; every product provides a particular type of functionality. In any case, the deleted exception allows MS to do on a part of the desktop what it is prohibited from doing on the rest of the desktop. Does anyone wonder which part of the desktop will grow, and which shrink, under such strictures? Moreover the exception allows MS this freedom with respect to any "list" of icons, shortcuts or menu entries. What is an icon but an image with associated text? What is a list but an item-by-item display of entries? How does a "list" of icons differ from a desktop display of icons? Query: should the prohibitions this section III.I be extended to cover nonMS apps as well as nonMS middleware?]

- (b) enabling or disabling automatic invocations pursuant to Section III.C.3 of this Final Judgment that are used to launch Non-Microsoft Middleware Products or Microsoft Middleware Products. The mechanism shall offer the end user a separate and unbiased choice with respect to enabling or removing access (as described in this
- subsection III.IH.1) and altering default invocations (as described in the following subsection III.IH.2) with regard to each such Microsoft Middleware Product or Non-Microsoft Middleware Product and may offer the end-user a separate and unbiased choice of enabling or removing access and altering default configurations as to all Microsoft Middleware Products as a group or all Non-Microsoft Middleware Products as a group.
- 2.Allow end users (via a mechanism readily available from the desktop or Start menu), OEMs (via standard OEM preinstallation kits), and Non-Microsoft Middleware Products-(via a mechanism which may, at Microsoft's option, require confirmation from the end user) to designate a Non-Microsoft Middleware Product to be invoked in place of that Microsoft Middleware Product (or vice versa) in any case where the Windows Operating System Product would otherwise launch the Microsoft Middleware Product in a separate Top-Level Window and display either (i) all of the user interface elements or (ii) the Trademark of the Microsoft Middleware Product.
- [a. Requiring confirmation from the user to confirm their intent to substitute a nonMS middleware product is an unnecessary inhibitor. This paragraph seems aimed at preserving MS hegemony on the

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desktop by requiring those users who would eliminate MS middleware that is invoked in a visually prominent way to think twice.]

3.Ensure that a Windows Operating System Product does not (a) automatically alter an OEM's configuration of icons, shortcuts or menu entries installed or displayed by the OEM pursuant to Section III.C of this Final Judgment without first seeking confirmation from the user and or (b) seek such configuration from the end user for an automatic (as opposed to user-initiated) alteration of the OEM's configuration until 14 days after the initial boot up of a new Personal Computer. Microsoft shall not alter the manner in which a Windows Operating System Product automatically alters an OEM's configuration of icons, shortcuts or menu entries other than in a new version of a Windows Operating System Product.

- [a. subparagraphs (a) and (b) are inconsistent with one another.
- b. Section IIIC permits OEMs to configure the desktops on their own machines. MS should not be allowed to undercut that privilege at all, otherwise the purpose of IIIC is undercut.]

Notwithstanding the foregoing Section III.IH.2, the Windows Operating System Product may invoke a Microsoft Middleware Product in any instance in which:

1:that Microsoft Middleware Product would be invoked solely for use in interoperating with a server maintained by Microsoft (outside the context of general Web browsing), or

[The deleted exception is too broad. The parenthetical probably belongs after "interoperating", but even in that case, the exception would be overbroad. Since a reasonable purpose for for the breadth is not evident, it should be deleted.]

——2.that designated Non-Microsoft Middleware Product fails to implement a reasonable technical requirement (e.g., a requirement to be able to host a particular ActiveX control) that is necessary for valid technical reasons to supply the end user with functionality consistent with indispensable to a Windows Operating System Product, provided that the technical reasons are described in the disclosures required of Microsoft by Sections IIID., IIIE., and IIIF. of this Final Judgment a reasonably prompt manner to any ISV that requests them.

- [a. Only where a middleware function is indispensable to Windows and not provided in nonMS middleware should Windows be able to invoke MS middleware instead of the nonMS middleware selected by an OEM or user.
- b. This subsection would disadvantage any nonMS middleware that chose not to utilize *every* function of Windows, no matter how trivial.
- c. The technical reasons should be described when disclosures called for in 3D and 3E are made so that nonMS middleware vendors do not waste development moneys on ineffectual solutions.]

Microsoft's obligations under this Section III. IH as to any new Windows Operating System Product shall be determined based on the Microsoft Middleware Products which exist(a) seven months prior to the last beta test version (i.e., the one immediately preceding the first release candidate) of that Windows Operating System Product, or (b) as of the time for disclosure under Sections IIID., IIIE. or IIIF. of this Final Judgment, whichever first occurs.

[As soon as the referenced disclosures are made, nonMS middleware vendors and OEMs will start adapting their products. If there is something they need to do to avoid MS interference with their ability to alter the MS desktop, they should be told what it is from the outset. Lengthy betas for Windows versions are not uncommon due to MS' tendency to want to ship versions before they are stable, and without the change suggested above, OEMs and most particularly nonMS middleware

vendors could waste substantial development effort.]

J4. Microsoft shall offer to license to ISVs, IHVs, IAPs, ICPs, and OEMs any intellectual property rights owned or licensable by Microsoft that are required to exercise any of the options or alternatives expressly provided to them under this Final Judgment, provided that

1.all terms, including royalties or other payment of monetary consideration, are reasonable and non-discriminatory;

2.the scope of any such license (and the intellectual property rights licensed thereunder) need be no broader than is necessary to ensure that an ISV, IHV, IAP, ICP or OEM is able to exercise the options or alternatives expressly provided under this Final Judgment (e.g., an ISV's, IHV's, IAP's, ICP's and OEM's option to promote Non-Microsoft Middleware Products shall not confer any rights to any Microsoft intellectual property rights infringed by that Non-Microsoft Middleware Product, unless Microsoft has refused to license such rights for use in such Non-Microsoft Middleware Product);

3.an ISV's, IHV's, IAP's, ICP's, or OEM's rights may be conditioned on its not assigning, transferring or sublicensing its rights under any license granted under this provision, where such condition is commercially reasonable;

[For example, sublicensing or assigning to a wholly-owned owned subsidiary would be reasonable more often than not, as would assigning rights to an acquiring company. DoJ seems to feel that the overall requirement of 3.I.1 that license terms be reasonable negates the need for a restatement of the reasonability requirement here. Maybe, but why leave the matter to interpretation?]

4.the terms of any license granted under this section are in all respects consistent with the express terms of this Final Judgment; and

5.an ISV, IHV, IAP, ICP, or OEM may be required to grant to Microsoft on reasonable and nondiscriminatory terms a license to any intellectual property rights it may have relating to the exercise of their options or alternatives provided by this Final Judgment owns that are extensions of the intellectual property licensed to such ISV, IHP, IAP or OEM and actually implemented in the products or services of such ISV, IHV, IAP, ICP, or OEM relating to the exercise of their options or alternatives provided by this Final Judgment; the scope of such license shall be no broader than is necessary to insure that Microsoft can provide such options or alternatives.

[A blanket grantback of license to all intellectual property rights that a third party "may have" that relate to its options and alternatives under the Final Judgment (including, apparently, trademarks and trade secrets), whether they have anything to do with Windows APIs or GUI or not seems excessive, to put it mildly. "May have" could include rights that are not owned, but licensed from others. "Related to" could refer to internal design of the third-party's middleware, application software or GUI personalization. The changes suggested above would limit the grantback to rights owned by the third party that arise from development work done by or for the third party utilizing IP rights granted by MS under the Final Judgment. In the Competitive analysis statement, the DoJ worries about a third party that has patented a feature of its middleware or applications software that consists of a particular pattern of calls to the operating system, and that the Final Judgment might require Microsoft to disclose that feature to the interfaces used by that third party to others so they could implement similar features. However, if all information about calls to the operating system are available to all ISVs, then how they make use of the calls is in element of their competitive advantage, and they are entitled to protect it. One hopes the Final Judgment does not allow Microsoft to pass valuable intellectual property of one ISV on to other ISVs willy nilly. There is a real-world reason why Microsoft would

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need a license from one third party in order to be able to provide the same interfaces to all third parties, but it's not the DoJ's reason: the third party may figure out how to fix a bug in an API, or how to improve an API, and tell Microsoft. Microsoft may wish to fix or improve the API. If it does so, the fix or improvement should not be for the benefit of the clever third party only; Microsoft should be a be to license it to others. Of course, the clever API should be able to collect a royalty.]]

Beyond the express terms of any license granted by Microsoft pursuant to this section, this Final Judgment does not, directly or by implication, estoppel or otherwise, confer any rights, licenses, covenants or immunities with regard to any Microsoft intellectual property to anyone.

K-J. No provision of this Final Judgment shall:

1.Require Microsoft to document, disclose or license to third parties: (a) portions of APIs or Documentation or portions or layers of Communications Protocols that are not required to be used in order to achieve interoperability with Microsoft Platform Software and the disclosure of which would compromise the security of a particular installation or group of installations of Microsoft anti-piracy, anti-virus, software licensing, digital rights management, encryption or authentication systems, including without limitation, keys, authorization tokens or enforcement criteria; or (b) any API, interface or other information related to any Microsoft product if lawfully directed not to do so by a governmental agency of competent jurisdiction. In circumstance (b), if such nondisclosure impairs interoperability with Microsoft Platform Software, Microsoft must use its best efforts to create an alternative API, interface or other information that provides comparable functionality.

- [a. A real problem is identified in subparagraph (a), but the solution is pernicious. Security is a serious problem for Windows, and MS should not be discouraged from addressing that problem; on the other hand, MS should not be able to integrate security solutions into its products in such a way as to frustrate interoperability. The proposed added language is designed to prevent that.

 b. Subparagraph (b) does not relate specifically to security. The "government agency" could be a court enjoining MS from infringing someone's patent or copyright. Where a function utilized by MS applications or middleware becomes unavailable to applications or middleware competitors, MS should provide a reasonable alternative.]
- 2.Prevent Microsoft from conditioning any license of any API, Documentation or Communications Protocol related to anti-piracy systems, anti-virus technologies, license enforcement mechanisms, authentication/authorization security, or third party intellectual property protection mechanisms of any Microsoft product to any person or entity on the requirement that the licensee: (a) has no history of software counterfeiting or piracy or willful violation of intellectual property rights, (b) has a reasonable business need for the API, Documentation or Communications Protocol for a planned or shipping product, (c) meets reasonable, objective standards-established by Microsoft for certifying the authenticity and viability of its business.
- [a. The standards "reasonable" and "objective" invoke community opinion, not the opinion of a single entity, and certainly not an entity with a strong interest in limiting disclosures made under the Final Judgment.
- b. Using "viability" as a criterion for allowing access to APIs will prevent legitimate startups and small companies from using the benefits of the Final Judgment to compete with larger beneficiaries, and will require financial and technical assessments that entail disclosures to Microsoft the nature of which may discourage participation in the benefits of the Final Judgment.]
- (d) agrees to submit, at its own expense, any computer program using such APIs, Documentation or Communication Protocols to third-party verification, approved by Microsoft, by a reputable third party, to

test for and ensure verification and compliance with Microsoft specifications for use of the API or interface, which specifications shall be related to proper operation and integrity of the systems and mechanisms identified in this paragraph.

[The third party verification should be independent of MS; perhaps arranged by the TC. Allowing Microsoft to select the third party is like allowing the fox to select the guard for the chickens.]

<u>LK.</u> Starting at the earlier of the release of Service Pack 1 for Windows XP or 12 months after the submission of this Final Judgment to the Court, Microsoft shall (a) separately price Internet Explorer, Outlook Express, MSN Messenger Service, windows Media Player and Net Meeting as offered in Windows Operating System Products, (b) and provide a means through the user interface to those products for users to delete the code that provides the functionality of those products (but not functionality essential to other components of Windows Operating System Products), (c) arrange for such act of deletion to create a proof of deletion, which the user can provide to Microsoft in exchange for a rebate in the amount of the price so established, and (d) offer options (a)-(c) above for any new functionality that Microsoft makes available either through a graphical user interface launch capability or by automatic opening of a Top Window in a Windows Operating System Program.

[This paragraph is intended to halt the extension of Windows' monopoly power into middleware and applications sectors, and restore competitive conditions, for the products listed above, in a nondisruptive way.]

IV.Compliance and Enforcement Procedures

A. Enforcement Authority

- 1. The Plaintiffs shall have exclusive responsibility for enforcing this Final Judgment. Without in any way limiting
- 2.To determine and enforce compliance with this Final Judgment, duly authorized representatives of the United States, on reasonable notice to Microsoft and subject to any lawful privilege, shall be permitted the following:
- a. Access during normal office hours to inspect any and all source code, books, ledgers, accounts, correspondence, memoranda, **e-mail**, **electronic files** and other documents and records in the possession, custody, or control of Microsoft, which may have counsel present, regarding any matters contained in this Final Judgment.

[The change adds electronic records to the inspection list.]

b.Subject to the reasonable convenience of Microsoft and without restraint or interference from it, to interview, informally or on the record, officers, employees, or agents of Microsoft, who may have counsel present, regarding any matters contained in this Final Judgment.

c.Microsoft shall report annually on its activities relating to compliance with this Final Judgment. Upon written request of the United States, on reasonable notice given to Microsoft, Microsoft shall submit such other written reports under oath as requested regarding any matters contained in this Final Judgment.

[Although the TC is to report on its own activities, the TC report is no substitute for a regular,

comprehensive report by MS. The need to produce such a report is additional motivation for MS to comply on a timely and complete basis.]

- 3.The United States shall not disclose any information or documents obtained from Microsoft under this Final Judgment except for the purpose of securing compliance with this Final Judgment, in a legal proceeding to which the United States is a party, or as otherwise required by law; provided that the United States must provide ten days' advance notice to Microsoft before disclosing in any legal proceeding (other than a grand jury proceeding) to which Microsoft is not a party any information or documents provided by Microsoft pursuant to this Final Judgment which Microsoft has identified in writing as material as to which a claim of protection may be asserted under Rule 26(c)(7) of the Federal Rules of Civil Procedure.
- 4. The United States shall have the authority to seek such orders as are necessary from the Court to enforce this Final Judgment, provided, however, that the United States shall afford Microsoft a reasonable opportunity to cure alleged violations of Sections III.C, III.D, III.E, IIIF.and III.IH, provided further that any action by Microsoft to cure any such violation shall not be a defense to enforcement with respect to any knowing, willful or systematic violations.

B. Appointment of a Technical Committee

- 1. Within 30 days of entry of this Final Judgment, the parties shall create and recommend to the Court for its appointment a three-person Technical Committee ("TC") to assist in enforcement of and compliance with this Final Judgment.
- 2.The TC members shall be experts in **either (or both) the business** or the —software design and **development of systems** software—programming. No TC member shall have a conflict of interest that could prevent him or her from performing his or her duties under this Final Judgment in a fair and unbiased manner. Without limitation to the foregoing, no TC member (absent the agreement of both parties):

[There should be the flexibility to appoint to the TC someone with business sense.]

a.shall have been employed in any capacity by Microsoft, or by any competitor to Microsoft in respect of Microsoft Platform Software, within the past year, nor shall she or he be so employed during his or her term on the TC;

[As originally written, this requirement would essentially have limited TC members to being academics, since virtually everyone in the software industry competes with MS in some way. Even the limitation to platform software may be too broad.]

b.shall have been retained as a consulting or testifying expert by any person in this action or in any other action adverse to or on behalf of Microsoft; or

c.shall perform any other work for Microsoft, or for any competitor of Microsoft in respect of Microsoft Platform Software for one two years after the expiration of the term of his or her service on the TC.

[Again, this requirement as originally written was too restrictive. It may still be too restrictive for anyone in the software industry not on the verge of retirement.]

3. Within 7 days of entry of this Final Judgment, the United States and Microsoft shall each select one member of the TC, and those two members shall then select the third member. The selection and approval process shall proceed as follows.

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a.As soon as practicable after submission of this Final Judgment to the Court, the United States and Microsoft shall each identify to the other the individual it proposes to select as its designee to the TC. The United States and Microsoft shall not object to each other's selection on any ground other than failure to satisfy the requirements of Section IV.B.2 above. Any such objection shall be made within ten business days of the receipt of notification of selection.

b.The United States shall apply to the Court for appointment of the persons selected by the United States and Microsoft pursuant to Section IV.B.3.a above. Any objections to the eligibility of a selected person that the parties have failed to resolve between themselves shall be decided by the Court based solely on the requirements stated in Section IV.B.2 above.

c.As soon as practical after their appointment by the Court, the two members of the TC selected by the United States and Microsoft (the "Standing Committee Members") shall identify to the United States and Microsoft the person that they in turn propose to select as the third member of the TC. The United States and Microsoft shall not object to this selection on any grounds other than failure to satisfy the requirements of Section IV.B.2 above. Any such objection shall be made within ten business days of the receipt of notification of the selection and shall be served on the other party as well as on the Standing Committee Members.

d.The United States shall apply to the Court for appointment of the person selected by the Standing Committee Members. If the Standing Committee Members cannot agree on a third member of the TC, the third member shall be appointed by the Court. Any objection by Microsoft or the United States to the eligibility of the person selected by the Standing Committee Members which the parties have failed to resolve among themselves shall also be decided by the Court based on the requirements stated in Section IV.B.2 above.

4.Each TC member shall serve for an initial term of 30 months. At the end of a TC member's initial 30-month term, the party that originally selected him or her may, in its sole discretion, either request re-appointment by the Court to a second 30-month term or replace the TC member in the same manner as provided for in Section

IV.B.3.a above. In the case of the third member of the TC, that member shall be re-appointed or replaced in the manner provided in Section IV.B.3.c above.

5.If the United States determines that a member of the TC has failed to act diligently and consistently with the purposes of this Final Judgment, or if a member of the TC resigns, or for any other reason ceases to serve in his or her capacity as a member of the TC, the person or persons that originally selected the TC member shall select a replacement member in the same manner as provided for in Section IV.B.3.

6.Promptly after appointment of the TC by the Court, the United States shall enter into a Technical Committee services agreement ("TC Services Agreement") with each TC member that grants the rights, powers and authorities necessary to permit the TC to perform its duties under this Final Judgment. Microsoft shall indemnify each TC member and hold him or her harmless against any losses, claims, damages, liabilities or expenses arising out of, or in connection with, the performance of the TC's duties, except to the extent that such liabilities, losses, damages, claims, or expenses result from misfeasance, gross negligence, willful or wanton acts, or bad faith by the TC member. The TC Services Agreements shall include the following.

a.The TC members shall serve, without bond or other security, at the cost and expense of Microsoft on such terms and conditions as the United States approves, including the payment of reasonable fees and expenses.

b.The TC Services Agreement shall provide that each member of the TC shall comply with the

limitations provided for in Section IV.B.2 above.

7.Microsoft shall provide the TC with a permanent office, telephone, and other office support facilities at Microsoft's corporate campus in Redmond, Washington. Microsoft shall also, upon reasonable advance notice from the TC, provide the TC with reasonable access to available office space, telephone, and other office support facilities at any other Microsoft facility identified by the TC. The TC offices provided by Microsoft hereunder shall not be accessible by Microsoft personnel except in cases of physical emergency.

[Obviously, the compliance authority should have secure facilities.]

- 8. The TC shall have the following powers and duties:
- a. The TC shall have the power and authority to monitor Microsoft's compliance with its obligations under this final judgment.
 - b. The TC may, on reasonable notice to Microsoft:
- i.interview, either informally or on the record, any Microsoft personnel, who may have counsel present; any such interview to be subject to the reasonable convenience of such personnel and without restraint or interference by Microsoft;
- ii.inspect and copy any document source code, books, ledgers, accounts, correspondence, memoranda, e-mail, electronic files and other documents and records in the possession, custody or control of Microsoft personnel;

[Better to repeat the inspection list from A.2.a above than to create confusion by mentioning only one of the items from that list.]

- iii.obtain reasonable access to any systems or equipment to which Microsoft personnel have access;
- iv.obtain access to, and inspect, any physical facility, building or other premises to which Microsoft personnel have access; and
- v.require Microsoft personnel to provide compilations of documents, data and other information, and to submit reports to the TC containing such material, in such form as the TC may reasonably direct.
- c.The TC shall have access to Microsoft's source code, subject to the terms of Microsoft's standard a source code Confidentiality Agreement, as approved by the United States and to be agreed to by the TC members pursuant to Section IV.B.9 below, and by any staff or consultants who may have access to the source code.
- The TC may study, interrogate and interact with the source code in order to perform its functions and duties, including the handling of complaints and other inquiries from non-parties.
- d.The TC shall receive complaints from the Compliance Officer, third parties or the United States and handle them in the manner specified in Section IV.D below.
- e.The TC shall report in writing to the United States every six months until expiration of this Final Judgment the actions it has undertaken in performing its duties pursuant to this Final Judgment, including the identification of each business practice reviewed and any recommendations made by the TC.

f.Regardless of when reports are due, when the TC has reason to believe that there may have been a failure by Microsoft to comply with any term of this Final Judgment, the TC shall immediately notify the United States in writing setting forth the relevant details.

g.TC members may communicate with non-parties about how their complaints or inquiries might be resolved with Microsoft, so long as the confidentiality of information obtained from Microsoft is maintained.

h.The TC may hire at the cost and expense of Microsoft, with prior notice to Microsoft and subject to approval by the United States, such staff or consultants (all of whom must meet the qualifications of Section IV.B.2) as are reasonably necessary for the TC to carry out its duties and responsibilities under this Final Judgment. The compensation of any person retained by the TC shall be based on reasonable and customary terms commensurate with the individual's experience and responsibilities.

i. The TC shall account for all reasonable expenses incurred, including agreed upon fees for the TC members' services, subject to the approval of the United States. Microsoft may, on application to the Court, object to the reasonableness of any such fees or other expenses. On any such application: (a) the burden shall be on Microsoft to demonstrate unreasonableness; and (b) the TC member(s) shall be entitled to recover all costs incurred on such application (including reasonable attorneys' fees and costs), regardless of the Court's disposition of such application, unless the Court shall expressly find that the TC's opposition to the application was without substantial justification.

9.Each TC member, and any consultants or staff hired by the TC, shall sign a confidentiality agreement prohibiting disclosure of any information obtained in the course of performing his or her duties as a member of the TC or as a person assisting the TC to anyone other than Microsoft, the United States, or the Court. All information gathered by the TC in connection with this Final Judgment and any report and recommendations prepared by the TC shall be treated as Highly Confidential under the Protective Order in this case, and shall not be disclosed to any person other than Microsoft and the United States except as allowed by the Protective Order entered in the Action or by further order of this Court.

- 10.No member of the TC shall make any public statements relating to the TC's activities.
- C. Appointment of a Microsoft Internal Compliance Officer
- 1.Microsoft shall designate, within 30 days of entry of this Final Judgment, an internal Compliance Officer who shall be an employee of Microsoft with responsibility for administering Microsoft's antitrust compliance program and helping to ensure compliance with this Final Judgment.
- 2.The Compliance Officer shall supervise the review of Microsoft's activities to ensure that they comply with this Final Judgment. He or she may be assisted by other employees of Microsoft.
 - 3. The Compliance Officer shall be responsible for performing the following activities:

a.within 30 days after entry of this Final Judgment, distributing a copy of the Final Judgment to all officers and directors of Microsoft;

b.promptly distributing a copy of this Final Judgment to any person who succeeds to a position described in Section IV.C.3.a above;

c.ensuring that those persons designated in Section IV.C.3.a above are annually briefed on the meaning and requirements of this Final Judgment and the U.S. antitrust laws and advising them that

Microsoft's legal advisors are available to confer with them regarding any question concerning compliance with this Final Judgment or under the U.S. antitrust laws;

d.obtaining from each person designated in Section IV.C.3.a above an annual written certification that he or she: (i) has read and agrees to abide by the terms of this Final Judgment; and (ii) has been advised and understands that his or her failure to comply with this Final Judgment may result in a finding of contempt of court;

e.maintaining a record of all persons to whom a copy of this Final Judgment has been distributed and from whom the certification described in Section IV.C.3.d above has been obtained;

f.establishing and maintaining the website provided for in Section IV.D.3.b below.

g.receiving complaints from third parties, the TC and the United States concerning Microsoft's compliance with this Final Judgment and following the appropriate procedures set forth in Section IV.D below; and

h.maintaining a record of all complaints received and action taken by Microsoft with respect to each such complaint.

i. Making copies of the Final Judgment available to all employees responsible for design and development of Microsoft Platform Software or for relations with ISVs, IHVs, IAPs, ICPs or OEMs, and obtaining certifications from them of exactly the same type and form as described in paragraph C.2.e. above.

[Obviously, all such MS employees should read and commit to the Final Judgment, the provisions of which they will be involved in implementing.]

- D. Voluntary Dispute Resolution
- 1. Third parties may submit complaints concerning Microsoft's compliance with this Final Judgment to the United States, the TC or the Compliance Officer.
- 2.In order to enhance the ability of the United States to enforce compliance with this Final Judgment, and to advance the parties' joint interest and the public interest in prompt resolution of issues and disputes, the parties have agreed that the TC and the Compliance Officer shall have the following additional responsibilities.
 - 3. Submissions to the Compliance Officer.
- a. Third parties, the TC, or the United States in its discretion may submit to the Compliance Officer any complaints concerning Microsoft's compliance with this Final Judgment. Without in any way limiting its authority to take any other action to enforce this Final Judgment, the United States may submit complaints related to Sections III.C, III.D, III.E, III. F. and III. I-H to the Compliance Officer whenever doing so would be consistent with the public interest.

b.To facilitate the communication of complaints and inquiries by third parties, the Compliance Officer shall place on Microsoft's Internet website, in a manner acceptable to the United States, a copy of this Final Judgment and the procedures for submitting complaints. To encourage whenever possible the informal resolution of complaints and inquiries, the website shall provide a mechanism for communicating complaints and inquiries to the Compliance Officer.

[The procedures for submitting complaints would be more or less meaningless without access the Final Judgment, which is the context for the complaints.]

c.Microsoft shall have 30 days after receiving a complaint to attempt to resolve it or reject it, and will then promptly advise the TC of the nature of the complaint and its disposition.

4. Submissions to the TC.

a. The Compliance Officer, third parties or the United States in its discretion may submit to the TC any complaints concerning Microsoft's compliance with this Final Judgment.

b. The TC shall investigate complaints received and will consult with the United States regarding its investigation. At least once during its investigation, and more often when it may help resolve complaints informally, the TC shall meet with the Compliance Officer to allow Microsoft to respond to the substance of the complaint and to determine whether the complaint can be resolved without further proceedings.

c.If the TC concludes that a complaint is meritorious, it shall advise Microsoft and the United States of its conclusion and its proposal for cure.

d.No work product, findings or recommendations by the TC may be admitted in any enforcement proceeding before the Court for any purpose, and no member of the TC shall testify by deposition, in court or before any other tribunal regarding any matter related to this Final Judgment, unless the conduct of Microsoft or its personnel vis a vis the TC or in respect of the TC's responsibilities is at issue in the case.

[There are certain types of court proceedings that could not sensibly proceed without such testimony.]

e.The TC may preserve the anonymity of any third party complainant where it deems it appropriate to do so upon the request of the United States or the third party, or in its discretion.

V.Termination

A. Unless this Court grants an extension, tThis Final Judgment will expire on the fifth anniversary of the date it is entered by the Court. It will automatically be extended unless this Court determines to the contrary as to all or any portion of this Final Judgment prior to the expiration date.

[Five years is a grossly insufficient period of time to restore competitive conditions to the market.]

B.In any enforcement proceeding in which the Court has found that Microsoft has engaged in a pattern of knowing, willful and systematic violations, the United States may apply to the Court for an additional one-time extension of this Final Judgment of up to two five years, together with such other relief as the Court may deem appropriate.

VI.Definitions

A."Application Programming Interfaces (APIs)" means the interfaces, including any associated callback interfaces, that Microsoft Middleware or Microsoft application software running on a Windows Operating System Product uses <u>directly</u> or <u>indirectly</u> to call upon that Windows Operating System Product in order to obtain any services from that Windows Operating System Product.

[Changed to include application interfaces and in recognition of the fact that many (perhaps most) calls to Windows functionality are indirect.]

B."Communications Protocol" means the set of rules for information exchange to accomplish predefined tasks between a Windows Operating System Products on a client computer and Windows 2000 Server or products marketed as its their successors running on a server computer and connected via a local area network or a wide area network. These rules govern the format, semantics, timing, sequencing, and error control of messages exchanged over a network. Communications Protocol shall not include protocols used only to remotely administer Windows 2000 Server and products marketed as its successors.

[Changed to account for peer-to-peer protocols and to restrict the exclusion of W2Ks remote administration protocols. Note: W2Ks, in this draft, is included in Windows Operating System Products.]

C."Consideration" means any monetary payment or the provision of preferential licensing terms; technical, marketing, and sales support; enabling programs; product information; information about future plans; developer support; hardware or software certification or approval; or permission to display trademarks, icons or logos.

- D."Covered OEMs" means the 20 OEMs with the highest worldwide volume of licenses of Windows Operating System Products reported to Microsoft in Microsoft's fiscal year preceding the effective date of the Final Judgment. The OEMs that fall within this definition of Covered OEMs shall be recomputed by Microsoft as soon as practicable after the close of each of Microsoft's fiscal years.
- E."Documentation" means all information regarding the identification and means of using APIs that a person of ordinary skill in the art requires to make effective use of or effectively implement those APIs. At minimum, such information shall be of the sort and to the level of specificity, precision and detail that Microsoft customarily provides for APIs it documents in the Microsoft Developer Network ("MSDN").
- F."IAP" means an Internet access provider that provides consumers with a connection to the Internet, with or without its own proprietary content.
- G."ICP" means an Internet content provider that provides content to users of the Internet by maintaining Web sites.
- H."IHV" means an independent hardware vendor that develops hardware to be included in or used with a Personal Computer running a Windows Operating System Product.
- I."ISV" means an entity other than Microsoft that is engaged in the development or marketing of software products designed to run on a Windows Operating System Product.
 - J. "Microsoft Middleware" means software code that
- 1.Microsoft distributes separately from a Windows Operating System Product to update that Windows Operating System Product;
 - 2.is Trademarked;
 - 3.provides the same or substantially similar functionality as a Microsoft Middleware Product; and
 - 4.includes at least the software code that controls most or all of the user interface elements of that

5. v. microsoft -- Open Source Draft I mai Judgment

Microsoft Middleware.

Software code described as part of, and distributed separately to update, a Microsoft Middleware Product shall not be deemed Microsoft Middleware unless the TC determines, pursuant to a request from Microsoft, that it shall not. The TC may establish guidelines for Microsoft's guidance in determining which updates are to be considered Microsoft Middleware under this Final Judgment. identified as a new major version of that Microsoft Middleware Product. A major version shall be identified by a whole number or by a number with just a single digit to the right of the decimal point.

[In aid of undoing the adverse effects of MS. activities found to have been unlawful, the presumption of this paragraph should be that software described as middleware should be deemed to be middleware unless some independent authority says it should not.]

K. "Microsoft Middleware Product" means

1.the functionality provided by Internet Explorer, Microsoft's Java Virtual Machine, Windows Media Player, Windows Messenger, Outlook Express and their successors in a Windows Operating System Product, and

2.for any functionality that is first licensed, distributed or sold by Microsoft after the entry of this Final Judgment and that is part of any Windows Operating System Product

a.Internet browsers, email client software, networked audio/video client software, instant messaging software or

b.functionality provided by Microsoft software that --

i.is, or in the year preceding the commercial release of any new Windows Operating System Product was, distributed separately by Microsoft (or by an entity acquired by Microsoft) from a Windows Operating System Product;

ii.is similar to the functionality provided by a Non-Microsoft Middleware Product; and

iii.is Trademarked.

FunctionalitySoftware code that Microsoft describes or markets as being part of a Microsoft Middleware Product (such as a service pack, upgrade, or bug fix for Internet Explorer), or that is a version of a Microsoft Middleware Product (such as Internet Explorer 5.5), shall be considered to be part of that Microsoft Middleware Product.

[Changed to be consistent with last paragraph of Section J. above.]

L."Microsoft Platform Software" means (i) a Windows Operating System Product and/or (ii) a Microsoft Middleware Product.

M."Non-Microsoft Middleware" means a non-Microsoft software product running on a Windows Operating System Product that exposes a range of functionality to ISVs through published APIs, and that could, if ported to or made interoperable with, a non-Microsoft Operating System, thereby make it easier for applications that rely in whole or in part on the functionality supplied by that software product to be ported to or run on that non-Microsoft Operating System.

N."Non-Microsoft Middleware Product" means a non-Microsoft software product running on a Windows Operating System Product (i) that exposes a range of functionality to ISVs through published APIs, and that could, if ported to or made interoperable with, a non-Microsoft Operating System, thereby make it easier for applications that rely in whole or in part on the functionality supplied by that software product to be ported to or run on that non-Microsoft Operating System, and (ii) of which at least-one million ten thousand copies were distributed in the United States within the previous year.

[Original excluded low-volume middleware for no apparent reason. The Competitive Impact Statement naively indicates that programs without a million copies distributed are either "minor" or "nonexistent". This severely disadvantages new entrants.]

- O."OEM" means an original equipment manufacturer of Personal Computers that is a licensee of a Windows Operating System Product.
- P."Operating System" means the software code that, inter alia, (i) controls the allocation and usage of hardware resources (such as the microprocessor and various peripheral devices) of a Personal Computer, (ii) provides a platform for developing applications by exposing functionality to ISVs through APIs, and (iii) supplies a user interface that enables users to access functionality of the operating system and in which they can run applications.
- Q."Personal Computer" means any computer configured so that its primary purpose is for use by one person at a time, that uses can use a video display and keyboard (whether or not that video display and keyboard is included) and that contains an Intel x86 compatible (or successor) microprocessor. Servers, television set top boxes, handheld computers, game consoles, telephones, pagers, and personal digital assistants are examples of products that are not Personal Computers within the meaning of this definition.

[The original definition is too restrictive. Personal computers are commonly used by multiple persons at a time. (E.g., for collecting personal info, depositing cookies, viewing webcam scenes, processing web-based applications, messaging.) They are also used as web servers and other types of servers.]

R."Timely Manner" means at the time Microsoft first releases a beta test version of a Windows Operating System Product that is distributed either to **200 or more ISVs or to**_150,000 or more beta testers **of any description**.

[The fact that the beta has gone to 200 ISVs means that the APIs are working at a reasonable level of stability. It also means that 200 ISVs favored by MS have a competitive advantage over other ISVs.]

- S."Top-Level Window" means a window displayed by a Windows Operating System Product that (a) has its own window controls, such as move, resize, close, minimize, and maximize, (b) can contain sub-windows, and (c) contains user interface elements under the control of at least one independent process.
- T."Trademarked" means distributed in commerce and identified as distributed by a name other than Microsoft or Windows that Microsoft has claimed as a trademark or service mark by (i) marking the name with trademark notices, such as or , in connection with a product distributed in the United States; (ii) filing an application for trademark protection for the name in the United States Patent and Trademark Office; or
- (iii) asserting the name as a trademark in the United States in a demand letter or lawsuit. Any product distributed under descriptive or generic terms or a name comprised of the Microsoft or Windows trademarks together with descriptive or generic terms shall not be Trademarked as that term is used in this Final Judgment.

Microsoft hereby disclaims any trademark rights in such descriptive or generic terms apart from the

Microsoft or Windows trademarks, and hereby abandons any such rights that it may acquire in the future.

U."Windows Operating System Product" means the software code (as opposed to source code) distributed commercially by Microsoft for use with Personal Computers as Windows 2000 Professional, Windows XP Home, Windows XP Professional, and predecessors and successors to the foregoing, including without limitation the Personal Computer versions of the products currently code named "Longhorn" and "Blackcomb" and their successors, including upgrades, bug fixes, service packs, etc. Subject to the provisions of this Final Judgment, T the software code that comprises a Windows Operating System Product shall be determined by Microsoft in its sole discretion.

- [a. Microsoft and DoJ may like to think that the world has shifted to Windows Professional and XP, but that is not the case. To be effective, these remedies need to apply to 32-bit versions of Windows still in active use.
- b. The distinction between server and client versions of these products has in the past been thought to be artificial and in some cases trivial. Under those circumstances, Microsoft should not be given an opportunity to evade the Final Judgment by tacking the word "Server" to the end of a product name.]

VII.Further Elements

Jurisdiction is retained by this Court over this action and the parties thereto for the purpose of enabling either of the parties thereto to apply to this Court at any time for further orders and directions as may be necessary or appropriate to carry out or construe this Final Judgment, to modify or terminate any of its provisions, to enforce compliance, and to punish violations of its provisions.

VIII. Third Party Rights

Nothing in this Final Judgment is intended to confer upon any other persons any rights or remedies of any nature whatsoever hereunder or by reason of this Final Judgment, or to restrict in any way any rights or remedies of any nature whatsoever conferred on any other persons otherwise than by reason of this Final Judgment.

[It would be a more effective settlement if third parties were given rights and remedies directly, but then again there might be no settlement at all if MS were faced with private litigation over violations of the Final Judgment. In any case, the Final Judgment should make clear that as a result of the settlement third parties do not lose any rights or remedies they would otherwise have.]

^{*} Formerly, "Quick and Dirty Open Source Redraft". Revs 0 and .1 were Quick and Dirty. Revs 0.2-0.4 were internal. Rev .2 is more reliable and reasonably stable. For those not conversant with Microsoft history, QDOS was the operating system bought from Seattle Software and turned into DOS, the first operating system for the IBM PC.